Reviewer's report

Title: Is the tide turning again for cephalosporin resistance in Neisseria gonorrhoeae in Europe? Results from the 2013 European surveillance

Version: 1 Date: 26 April 2015

Reviewer: Sanjay Ram

Reviewer's report:

This is a well written paper and the data are presented clearly. The data highlight the need to continue active surveillance of gonococcal isolates. The following suggestions are for the authors' consideration (discretionary revisions).

1. If the numbers are available, it would be helpful to also provide the absolute numbers of reported cases of gonorrhea in Europe in 2013 and compare this with the prior years. This would provide a more complete picture and context to interpret the percentage of resistant strains (absolute numbers may be rising, even though percentages have not significantly risen).

2. Lines 176-180. Because all ceftriaxone resistant strains are also resistant to cefixime (and therefore is a subset of cefixime resistant strains), the authors should consider first presenting data on the isolates resistant only to cefixime (but ‘S’ to ceftriaxone) in terms of concomitant resistance to Cipro and Azithro (as done in the following sentence) and then the data with the seven ceftriaxone-resistant strains. This may better highlight the differences between these two subsets of ESC-resistant isolates.

3. An intriguing finding is that isolates resistant to azithro and Cipro are less frequently associated with concurrent chlamydia infection. Can the authors hypothesize why this is the case? Is it simply because Cipro and azithro are active versus chlamydia, therefore gonococci isolated from Cipro/azithro treatment failures (and likely resistant to these antibiotics) will not show concomitant chlamydia? Addressing this finding may be merited.

4. Lines 239-241. It's not clear how more sensitive diagnostics will contribute to reducing the reservoir of (resistant) strains such as NG-MAST 1407. I presume it is meant that diagnosing greater numbers of infections – presumably those that are sensitive – would reduce the percentage of resistant isolates? Please clarify this sentence.

5. Line 66 – „.. again slightly increased..“ rather than „.. was again slightly increasing..“?

6. Line 90 – consider adding the reference by Laga et al, AIDS. 1993 Jan;7(1):95-102. PMID: 8442924. This was one of the first studies that showed that non-ulcerative STIs were associated with higher rates of HIV transmission.
Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

Non-financial competing interest:
Dr. Unemo, the senior author on this paper, has provided my lab a ceftriaxone-resistant gonococcal isolate and is a coauthor on manuscripts from my lab that are currently being reviewed.